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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/407,751	09/28/1999	Vincent Pluinage	RXSD-1000-1	3162

22470 7590 06/29/2005

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EXAMINER

JACOBSON, TONY M

ART UNIT PAPER NUMBER

2644

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/407,751

Applicant(s)

PLUVINAGE ET AL.

Examiner

Tony M. Jacobson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 39-41, 44-48, 50-55 and 57-73 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 39-41, 44-48, 50-55 and 57-73 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Drawings*

1. The drawings were received on 17 December 2004. These drawings are accepted.

### *Claim Objections*

2. The claims are objected to because the small print size was not conveyed accurately by facsimile transmission, making reading difficult. Specifically, it is not possible to determine with any certainty which portions of the text of the current claims are marked by strikethrough or underlining. Substitute claims of proper print quality on good quality paper are required. See 37 CFR 1.52(b).

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 39, 40, 44, 47, 48, 50-55, 60-63, 65-67, and 69-73** are rejected under 35 U.S.C. 103(a) as being unpatentable over Terry et al. (US 5,388,185) in view of Keen (US 5,638,438).

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5. Regarding **claim 39**, Terry et al. disclose in Figs. 1, 2, and 6 a system for adaptive processing of telephone signals (producing customized audio data) that, in association with one or more users, performs a method for producing customized audio data, comprising:

providing a user interface (a telephone and associated dialer keypad) and a [plurality] of audio data products (audio from any of a plurality of distant terminals or other sources of telephone audio) by which a customer is able to select an audio data product (a telephone call);

receiving a request for a particular audio data product (a particular distant station or service to call) from the [plurality] of audio data products, wherein the request is made by the customer via the user interface (the dialer keypad);

receiving a customer hearing profile associated with the customer from a machine-readable registry of customer hearing profiles (column 5, lines 10-13);

obtaining the particular audio data product (the audio from a distant station or service); and

associating the particular audio data product with the customer hearing profile for use in producing a customized audio data product in response to the particular audio data product and the associated customer hearing profile, and delivering the customized audio data product for use by the customer (Terry et al. claim 1).

Terry et al. do not disclose that the user interface is a graphical user interface presenting a catalog of audio data products; rather, the user interface presumably may comprise a "graphical" user interface in the form of a conventional telephone keypad.

At the time the present invention was made, it was notoriously well known to provide in telephones a graphical user interface in the form of a display screen, such as a liquid crystal display (LCD) screen, allowing a user to select from a catalog (list) of displayed options (such as a list of stored names and corresponding telephone numbers from a personal directory stored within the telephone) by means of, for example, a set of cursor keys, a rotary scrolling switch, or a touch-screen feature of the display screen. Keen discloses generally an example of a telephone system incorporating such an interface in the form of a touch-screen. The advantages of such graphical user interfaces which provide a catalog of options over conventional simple numeric keypad graphical user interfaces (e.g., improved ease of use and increased utility by including a directory) were well known at the time the present invention was made.

At the time the present invention was made, it would have been obvious to one of ordinary skill in the art to employ a telephone terminal with a graphical user interface presenting a catalog (list) of audio data products (different remote stations or phone services to call) by which a customer is able to select such an audio data product, as taught by Keen, in the telephone system of Terry et al. in order to obtain the well known benefits associated with such interfaces, as described above.

6. Regarding **claim 40**, in the method of Terry et al., delivering the customized audio data product for use by the customer includes transmitting the customized audio data product to a remote site (relative to the source of the audio data product; i.e., to the customer's telephone terminal – claim 1.d.).

7. Regarding **claim 44**, as broadly as disclosed and claimed, "transfer function" could refer to any functional description of an input-output signal relationship of a signal-processing element, and such functional descriptions are typically described by a set of coefficients (e.g., coefficients of a differential equation, of a polynomial ratio, of a discrete-time impulse response, or simply gain coefficients at a plurality of frequencies). Thus, the threshold (T) and compression (S) values (coefficients) of the hearing impairment profiles, stored in tables 70 and 80 of Fig. 1 of Terry et al. together constitute coefficients of a transfer function or functions, as broadly as disclosed and claimed. Also, since a customized set of hearing parameters as described at column 5, lines 3-25 of Terry et al. is based on a customer's perception of sound, it is formed according to a psycho-acoustic characteristic of a customer. Thus, the customer hearing profile comprises coefficients (T and S values of tables 70 and 80) of a transfer function to transform the audio data product according to a psycho-acoustic characteristic of a customer (column 1, line 59 –column 2, line 11).

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8. Regarding **claim 47**, in the system and method of Terry et al., the machine-readable registry comprises customer hearing profiles corresponding to a plurality of registered customers (column 2, lines 27-37), and further includes resources for reading, modifying, and writing particular customer hearing profiles in the plurality (column 5, lines 1-31). The normal method performed by the system includes the steps of reading, modifying, and writing particular customer hearing profiles in the plurality to maintain the registry.

9. Regarding **claim 48**, in the inherent method of Terry et al., modified according to the teachings of Keen as described above with regard to claim 39, the graphical user interface for access to the audio data product comprises (is) a network interface (an interface to the telecommunications network for the user).

10. Regarding **claims 50, 54, and 55**, Terry et al. disclose at column 3, lines 36-40 that the audio data product (and thus the catalog of audio data products presented by the graphical user interface of Keen) may comprise a speech signal generated at a sending end by a telephone user (claim 55), audio generated by a tape recording (claim 50), as well as other sources. A speech signal generated at a sending end by a telephone user can also be described as a live audio voice stream (especially in the context of digital audio input to the system, as disclosed at column 4, lines 50-53, relating to Applicant's claim 54).

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11. Regarding **claims 51-53**, Terry et al. disclose at column 3, lines 36-40 that the source of the audio data product in Fig. 1 may comprise a speech signal generated at the sending end by a telephone user, that the signal may be produced by a microphone, tape recording, oscillator, or other source of audio analog audio signal. Terry et al. do not explicitly disclose that the audio data product (source) comprises pre-recorded audio music tracks, live audio music streams, nor pre-recorded audio voice tracks. Official notice is taken that it was well known in the art at the time the present invention was made to provide various forms of pre-recorded (with a tape recording or equivalent means) and live audio (as from reception of a local radio or satellite broadcast) to a user of a telephone network. For example, it was well known to provide pre-recorded voice messages and prompts in automated PBX (private branch exchange) systems and other automated interactive telephone systems. It was also well known to provide either pre-recorded or live (streaming) "music on hold" in PBX systems and similar telephone systems having a "hold" function, the pre-recorded audio originating from a tape recording or similar means, and the live streaming music originating from a local or distant radio station or other streaming background music source provider. It would have been obvious to one of ordinary skill in the art at the time the present invention was made to provide any of these well-known audio sources at a distant (source) telephone station in the system of Terry et al., thus providing an audio data product that comprises pre-recorded audio music tracks, live audio music streams, or pre-recorded audio voice tracks. It is per se obvious to store in the directory (catalog) presented by the graphical user interface (touch-screen) of Keen the telephone number of one or



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more businesses having PBX systems with such pre-recorded music-on-hold features; thus, it would be obvious for the catalog (directory) of audio data products (telephone calls) to comprise these forms of audio tracks and streams.

12. Regarding **claim 60**, although Terry et al. do not explicitly disclose that the system includes logic to produce information about billing for requested audio data products for customers, the system, overall, includes a telephone network (column 3, lines 30-35). At the time the invention of Terry et al. was made (as well as at the time the present invention was made) public telephone networks substantially always comprised processing resources that include logic to produce billing information for requested audio data products (toll calls, special services such as directory assistance, etc.) for customers. The disclosure of Terry et al., therefore, inherently comprises processing resources including logic to produce information about billing for requested audio data products for customers.

13. Regarding **claims 61 and 62**, Terry et al. disclose in Figs. 2 and 6 and at column 4, lines 50-53 that the input and/or out of the system may be provided either in analog or digital form; thus, it renders obvious a method in which the catalog of audio data products comprises either a digitally-encoded or analog-encoded product (telephone call).

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14. Regarding **claim 63**, in the system of Terry et al. (employed in a telephone network as disclosed at column 3, lines 30-35), the catalog of audio data products (speed-dialing directory) would normally comprise data [products] (telephone calls) encoded according to a particular format (such as analog or digital) suitable for playback by audio systems (e.g., conventional analog or digital telephones) adapted for the particular format (as in a prior-art telephone network without the system of Terry et al.), and the customized audio data product comprises data encoded according to the same particular format. (As Terry et al. disclose that the system is employed within the telephone network and does not disclose any special or modified telephone set, the customized audio data product must inherently be delivered in the same original format to enable playing on the conventional telephone set. For instance, in one embodiment as shown in Fig. 1, the input signal to the system is received in an analog-encoded format, converted to a digitally-encoded format for customization processing within the system, and subsequently converted back to the original analog-encoded format to be forwarded to the receiving telephone set of the customer/user.)

15. Regarding **claim 65**, Terry et al. indicate at column 2, lines 27-37 that the database may contain a plurality of specific hearing profiles, each corresponding directly to one of a plurality of users, or it may have pre-defined profiles corresponding to (indicating) typical hearing impairments (hearing characteristic types) of customers. Thus for a customer who has selected one of the pre-defined ("typical") sets of hearing parameters, the database contains a value indicating a hearing characteristic or a

hearing characteristic type of the customer for whom the customized audio data product is to be played.

16. Regarding **claim 66**, because the user hearing profile in some embodiments of the system of Terry et al. is based on the user's actual (psycho-acoustic) perception of "comfort level" bands of noise which are presented over the telephone in an online hearing test as described at column 5, lines 13-18, the hearing profile so determined includes a specification of "psycho-acoustic characteristics" (the sensations or perceptions of a person due to sound) of a customer for whom the customized audio data product is to be played, as broadly as claimed.

17. Regarding **claim 67**, as described at column 1, line 59 –column 2, line 11, the individualized user hearing profiles used by the system of Terry et al. include an audiogram ("T Table" 70 of Fig. 1) characterizing a customer for whom the customized audio data product is to be played (a set of data representing the minimum sound intensity [threshold] for hearing as a function of frequency).

18. Regarding **claims 69-73**, the method of Terry et al., modified to employ the telephone with graphical user interface of Keen as described above with regard to claim 39, includes providing a source of a plurality of customer hearing profiles (in T-Table 70 and S-Table 80 of Terry et al. Fig. 1 – see column 5, lines 26-32), providing an interface accessible to a user via a network interface to accept data concerning a customer for

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whom the customized audio data product is to be played, accepting data via the network interface (the telephone and graphical user interface of Keen) concerning a customer for whom the customized audio data product is to be played, and producing or modifying a customer hearing profile for the registry in response to the accepted data (Terry et al. column 5, lines 1-32).

19. **Claims 41 and 57-59** are rejected under 35 U.S.C. 103(a) as being unpatentable over Terry et al. (US 5,388,185) in view of Keen (US 5,638,438) as applied to claim 39 above, and further in view of Moon et al. (US 6,433,801).

20. Regarding **claim 41**, in the method of Terry et al., delivering the customized audio data product for use by the customer includes storing the customized audio data product on a portable machine-readable medium. The digital signal processing indicated by Figs. 1 and 2 inherently requires temporarily storing the audio data on some sort of machine-readable medium, such as a random access memory (RAM) of the signal processor system (e.g. buffering as indicated by block 30), and such systems, including their memory, are inherently portable (capable of being carried or moved about). Alternatively, Moon et al. disclose generally a portable intelligent communications device (Fig. 1), comprising a telephone and employing a graphical user interface in the form of touch screen 30. Fig. 6 shows display screen 30 when a phone mode is selected, comprising a button near the top of the screen for recording a call. Moon et al. do not disclose an on-screen directory (catalog) for selecting and requesting

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a particular audio data product (selecting and dialing a telephone call); however one of ordinary skill in the art would expect the inclusion of such a personal phone directory feature with dialing capability to be included, as was common at the time the present invention was made, and as demonstrated by Keen. It would have been obvious to one of ordinary skill in the art at the time the present invention was made to combine the teachings of Keen and Moon et al. and form a telephone having a graphical user interface and recording feature as disclosed by Moon et al. and a speed-dialing directory presented via the graphical user interface as taught by Keen, whereby the graphical user interface presents a catalog of audio data products (telephone calls) by which a customer is able to select an audio data product (telephone call), as these features are each shown to be desirable in a telephone and their combination would obviously provide all these benefits together. It would have further been obvious to employ such a telephone in the telecommunications network of Terry et al. as the unspecified telephone required by that system. It would then be obvious to employ the telephone recording function suggested by Fig. 6 of Moon et al. to record a telephone call, which constitutes storing the customized audio data product on a portable machine-readable medium, since a machine-readable medium (e.g., RAM, flash memory, or hard disk drive) is inherent to the portable telephone of Moon et al. for storing the recorded telephone audio.

21. Regarding **claims 57-59**, by the same reasoning applied to claim 41 above, it would have been obvious to employ a telephone combining the teachings of Keen and

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Moon et al. (a portable telephone essentially as taught by Moon et al., incorporating a speed-dialing directory as taught by Keen) as the required telephone in the system and method of Terry et al. In the inherent normal method of operation of that system, the graphical user interface includes tools (on-screen virtual speed-dial buttons as taught by Keen or on-screen virtual DTMF keys as shown at the lower-right of Fig. 6 of Moon et al.) by which a user selects an instance of the audio data product (a telephone call), and issues a request for the selected instance. The method further includes providing tools (virtual keys of the virtual DTMF keypad shown in Fig. 6 of Moon et al.) by which a user adds and modifies a particular customer hearing profile in the registry (in accordance with the normal method of operating the system of Terry et al., as described at column 5, lines 1-32 of that reference).

22. **Claim 64** is rejected under 35 U.S.C. 103(a) as being unpatentable over Terry et al. (US 5,388,185) in view of Keen (US 5,638,438) as applied to claim 39 above, and further in view of Zanchi (US 5,630,159).

23. Regarding **claim 64**, Terry et al. do not disclose that the plurality of customer hearing profiles each include a value indicating an audio device on which the customized audio data product is to be played. Zanchi et al. disclose a method and system for providing customized audio data to a user according to user preferences, including audible (audio) preferences, according to the user identity, environment (e.g., office, home, vehicle, or aircraft), and the device on which the media (including audio) is

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to be played (e.g., cellular phone, organizer, personal computer, or vehicle) (See Figs. 2 and 11; column 2, lines 33-40; column 7, lines 4-12; and column 9, lines 49-55).

Although not explicitly disclosed by Zanchi et al., one of ordinary skill in the art would recognize that a primary reason for providing separate preference parameters (including audio preferences) is to compensate for differences in the way different devices render the same standard media (see column 7, lines 19-26), so that a desirable response is provided. It would have been obvious to one of ordinary skill in the art at the time the present invention was made to apply the teachings of Zanchi et al. to the system and method of Terry et al. by providing a value in each user hearing profile that indicates the device on which the customized audio data product is to be played, in order to allow consistent reproduction of the customized audio data product on a variety of different devices (different types of telephones).

24. **Claims 39, 47, and 48** are rejected under 35 U.S.C. 103(a) as being unpatentable over Knappe et al. (US 6,061,431) in view of Keen (US 5,638,438).

25. Regarding **claim 39**, Knappe et al. disclose in Fig. 1 a system (12) for producing customized audio data that, in association with one or more users, performs a method for producing customized audio data, comprising:

providing a user interface (a telephone 16 or 30 and associated dialer keypad) and a [plurality] of audio data products (audio from any of a plurality of distant terminals

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or other sources of telephone audio as is conventional in a telecommunications network) by which a customer is able to select an audio data product (a telephone call);

receiving a request for a particular audio data product (a particular distant station or service to call) from the [plurality] of audio data products, wherein the request is made by the customer via the user interface (the dialer keypad);

receiving a customer hearing profile associated with the customer from a machine-readable registry (24) of customer hearing profiles (column 1, lines 37-49; column 5, lines 33-35);

obtaining the particular audio data product (the audio from a distant station or service); and

associating the particular audio data product with the customer hearing profile for use in producing a customized audio data product in response to the particular audio data product and the associated customer hearing profile, and delivering the customized audio data product for use by the customer (column 1, lines 46-54; column 5, lines 33-35) .

Knappe et al. do not disclose that the user interface is a graphical user interface presenting a catalog of audio data products; rather, the user interface presumably may comprise a "graphical" user interface in the form of a conventional telephone keypad.

At the time the present invention was made, it was notoriously well known to provide in telephones a graphical user interface in the form of a display screen, such as a liquid crystal display (LCD) screen, allowing a user to select from a catalog (list) of displayed options (such as a list of stored names and corresponding telephone numbers



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from a personal directory stored within the telephone) by means of, for example, a set of cursor keys, a rotary scrolling switch, or a touch-screen feature of the display screen.

Keen discloses generally an example of a telephone system incorporating such an interface in the form of a touch-screen. The advantages of such graphical user interfaces which provide a catalog of options over conventional simple numeric keypad graphical user interfaces (e.g., improved ease of use and increased utility by including a directory) were well known at the time the present invention was made.

At the time the present invention was made, it would have been obvious to one of ordinary skill in the art to employ a telephone terminal with a graphical user interface presenting a catalog (list) of audio data products (different remote stations or phone services to call) by which a customer is able to select such an audio data product, as taught by Keen, in the telephone system of Knappe et al. in order to obtain the well known benefits associated with such interfaces, as described above.

26. Regarding **claim 47**, in the system and method of Knappe et al., modified according to the teachings of Keen as described above with regard to claim 39, the machine-readable registry (24 of Fig. 1) comprises customer hearing profiles corresponding to a plurality of registered customers (column 1, lines 37-46), and inherently includes resources for reading, modifying, and writing particular customer hearing profiles in the plurality (column 3, lines 1-10). The normal method performed by the system includes the steps of reading, modifying, and writing particular customer hearing profiles in the plurality to maintain the registry. (Although Knappe et al. do not

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explicitly disclose a step of modifying an existing customer hearing profile in the database, it was conventional in the art at the time to make such databases updatable, and it would have been per se obvious to provide means and steps to allow a customer to modify his hearing profile by retaking the hearing test described at column 3, lines 1-10.)

27. Regarding **claim 48**, in the method of Knappe et al., modified according to the teachings of Keen as described above with regard to claim 39, the graphical user interface for access to the audio data product comprises (is) a network interface (an interface to the telecommunications network for the user).

28. **Claims 44-46 and 68** are rejected under 35 U.S.C. 103(a) as being unpatentable over Knappe et al. (US 6,061,431) in view of Keen (US 5,638,438) as applied to claim 39 above, and further in view of Köpke et al. (US 4,471,171).

29. Regarding **claim 44**, Knappe et al. disclose a system and associated method meeting the limitations of claim 39, as described above. Knappe et al. disclose a customer hearing profile that comprises frequency shaping and gain parameters tailored to a particular user (column 1, lines 43-46). Knappe et al. disclose at column 3, lines 57-60 that frequency shaping, as employed in the disclosed system is well known in the art and is similar to that provided in custom hearing aids. It was well known in the audio signal processing art at the time the present invention was made to store a desired

frequency-shaping response for a programmable signal processor in the form of a transfer function, which in turn inherently comprises coefficients. For instance, Köpke et al. disclose a digital hearing aid and method, in which a desired response according to a user's hearing response is stored in an EEPROM or EARAM memory in the form of a transfer function. (See column 1, lines 15-19, and lines 47-60.) It would have been obvious to one of ordinary skill in the art at the time the present invention was made to store either the customer's hearing response or the desired response of the signal processor, determined therefrom, in the form of a transfer function, according to the teachings of Köpke et al. according to well-known practice in the prior art as a simple design choice to transform the audio data product according [to] a hearing characteristic of a customer. Knappe et al. further disclose at column 4, lines 30-46 that the system takes into account a person's perceptual audio (psycho-acoustic) characteristics by attenuating or discarding sound components that are outside the hearing range of the customer. Thus, the transfer function coefficients determined in the system of Knappe et al., modified according to the teachings of Keen and Köpke et al. as described above, will transform the audio data product according to a psycho-acoustic characteristic (the sensations or perceptions of a person due to sound) of the customer.

30. Regarding **claims 45 and 46**, Knappe discloses in Fig. 2 and at column 1, lines 43-46 and column 3, lines 38-50 that each record (customer hearing profile) (44) in the database (42) contains a telephone number (43) that provides an index to records (customer hearing profiles) in the database. Each telephone number is thus an

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identifier of the corresponding elements of the customer hearing profile, including the corresponding transfer function and the coefficients of the identified transfer function to transform the audio data product according to a hearing characteristic of a customer in the system of Knappe et al., modified according to the teachings of Keen and Köpke et al. as described above with regard to claim 44.

31. Regarding **claim 68**, "software" is broadly defined as computer instructions, data, or databases (anything that can be stored electronically) in a computer system, in contrast to the hardware (such as storage devices and display devices) that makes up the system. (Some broader definitions also include system and application documentation as software.) (See <http://www.openprojects.org/software-definition.htm>; <http://wi-fiplanet.webopedia.com/TERM/S/software.html>; or Merriam Webster's Collegiate Dictionary, Tenth Edition.) Because the transfer function coefficients of the customer hearing profiles in the system and method of Knappe et al., modified according to the teachings of Köpke et al. as described above, can be considered either as data to be utilized by the signal processor of the system or as coded instructions, directing the operation of the signal processor of the system, they can be described as software defining a transfer function for producing the customized audio data product.

***Response to Arguments***

32. Applicant's arguments with respect to **claims 39-41, 44-48, 50-55, and 57-73** have been considered but are moot in view of the new ground(s) of rejection.

33. New reference USPN 5,638,438 to Keen, directed to a telephone having a graphical user interface presenting a catalog of audio data products (telephone calls) to a customer, by which the customer is able to select an audio data product, and wherein a request for a particular audio data product from the catalog of audio data products is made by the customer via the graphical user interface, combines in an obvious manner with the systems and methods of either Terry et al. or Knappe et al. to render the methods of **claim 39** and most of the current dependent claims obvious, as described in the above rejections. Also, new reference USPN 6,433,801 to Moon et al., directed to a portable telephone having a graphical user interface and a call recording feature, combines with the above cited references in an obvious manner to render **claims 41 and 57-59** obvious, as also described in the rejections above.

34. While the examiner maintains that a conventional DTMF keypad of a telephone, with graphical markings, constitutes a "graphical user interface" according to the ordinary meanings of the words, Keen teaches a graphical user interface of the type implied by Applicant that clearly presents a catalog of audio data products (telephone

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calls) to a customer, by which the customer is able to select an audio data product, and wherein a request for a particular audio data product from the catalog of audio data products is made by the customer via the graphical user interface, as in amended claim 39.

### ***Conclusion***

35. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony M. Jacobson whose telephone number is 571-272-7521. The examiner can normally be reached on M-F 11:00-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh N. Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
tmj  
June 15, 2005

  
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